

2

V TIMN314 - COMMUNICATION LOG - [Passport Asset Suite 6 - Production]

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Contract: 00070241 Requestion: 00207505 From Date: Type: Contract Status: ISSUED 12/17/2012 Request Status: ISSUED 11/15/2012 Contract Image: Request Image:

2.20 - misc SOLE SOURCE JUSTIFICATION

Log Details									
Date	Type	From	To	OLE	Notes	Subject			
08/07/2014	WRITTEN	JASON	TANIA	D		***PHASE 1B, MILESTONE 0, NOTICE TO PROCEED***			
08/04/2014	LEGAL	ANNE	JASON	D		LEGAL REVIEW PHASE 1B, MILESTONE 0, NOTICE TO PROCEED			
06/09/2014	AMENDREC	CONSULTANT	TANIA	D		RCVD EMAILED SIGNED AMENDMENT 9			
05/28/2014	014NOTES	JASON Z	BGI	D		VERBAL: AMENDMENT IN PROGRESS			
01/23/2014	WRITTEN	BGI	FILE	D		MISC MITSUBISHI INT'L CORP SET UP AS PAYMENT MECHANISM FOR			
01/07/2014	WRITTEN	BGI	FILE	D		*****RESOLUTION 5651*****			
01/06/2014	WRITTEN	S. KLEIN	BGI	D		PASSPORT APPROVAL SIGNATURE SHEET FOR AMENDMENT #8 (#10 IN SYS)			
01/03/2014	WRITTEN	BGI	FILE	D		MISC 75814 SET UP AS PAYMENT MECHANISM FOR PARKER			
10/15/2013	AMENDREC	CONSULTANT	TANIA	D		RCVD ORIG SIGNED AMENDMENT 7			
10/09/2013	WRITTEN	TANIA	CONSULTANT	D		MAILED AMENDMENT 7 FOR SIG			
10/07/2013	WRITTEN	TANIA	JUDY	D		SUBMIT AMENDMENT 7 FOR INTERNAL REVIEW AND SIGNATURE			
09/27/2013	WRITTEN	CONSULTANT	TANIA	D		RCVD ORIG SIGNED AMENDMENT 3			
07/02/2013	WRITTEN	TANIA	FILE	D		AMENDMENT 6			
06/25/2013	WRITTEN	KRISTIN	JASON	D		AMENDMENT LANGUAGE			
05/31/2013	WRITTEN	TANIA	FILE	D		AMENDMENT 4			
05/31/2013	WRITTEN	TANIA	FILE	D		AMENDMENT 5			
05/17/2013	AMENDREC	CONSULTANT	TANIA	D		RCVD EMAILED SIGNED AMENDMENT 3			
05/17/2013	WRITTEN	TANIA	CONSULTANT	D		MAILED AMENDMENT 3 FOR SIGNATURE			
05/15/2013	WRITTEN	TANIA	JUDY	D		SUBMIT AMENDMENT 3 FOR INTERNAL REVIEW AND SIGNATURE			
05/14/2013	WRITTEN	TANIA	FILE	D		SIGNED AMENDMENT 2 2.8.2a Keso 5630 - somewhat			
04/01/2013	WRITTEN	TANIA	FILE	D		**SEE OLE CONCERNING CONTRACTS/PURCHASING QUESTIONS**			
03/29/2013	WRITTEN	JASON	TANIA	D		NOTIFICATION OF AMENDMENT 2			
03/27/2013	LEGAL	TANIA	KRISTIN	D		INFORMED LEGAL OF CONFERENCE CALL OUTCOME			
03/27/2013	LEGAL	TANIA	KRISTIN	D		EMAILED COPY OF CONTRACT FOR CONSULTANT CONFERENCE CALL			
03/27/2013	WRITTEN	TANIA	KRISTIN	D		UPDATE ON CONFERENCE CALL			
02/07/2013	AMENDREC	CONSULTANT	TANIA	D		RCVD ORIG SIGNED AMENDMENT 1			
01/09/2013	WRITTEN	TANIA	CONSULTANT	D		MAILED AMENDMENT 1 FOR SIGNATURE			
01/08/2013	WRITTEN	TANIA	JUDY	D		SUBMIT AMENDMENT 1 FOR INTERNAL REVIEW AND SIGNATURE			
12/17/2012	NTP	TANIA	CONSULTANT	D		RCVD ORIG SIGNED PSC-ISSUED NTP EFF 12/17/12			
12/17/2012	WRITTEN	TANIA	FILE	D		*****RESOLUTION 5611*****			

Ordered from bottom to top

RESOLUTION NO.5611

A RESOLUTION Declaring the Modular Energy Storage Appliance Project to be "Special Facilities" for Purposes of RCW 39.04.270 and Authorizing Execution of an Agreement with 1Energy Services for the Project

WHEREAS, Public Utility District No. 1 of Snohomish County (the "District") has identified energy storage technology as an important component of its strategy of meeting growth first through conservation and then a diverse mix of renewable resource technologies, including distributed generation; and

WHEREAS, while battery-based storage technology is available, the industry has not developed the software and systems that would enable electric utilities to deploy battery-based storage equipment on a modular basis, and to manage the use of that storage as part of its grid operations; and

WHEREAS, District staff is proposing to enter into an agreement for the development and deployment of a prototype that will provide a one-megawatt capacity battery-based energy storage at the District's Edgecomb substation, known as the Modular Energy Storage Appliance Project ("Project"); and

WHEREAS, the Project will be developed in two phases, consisting of a system design and project plan, followed by the final design and engineering, equipment procurement and installation upon approval of the first phase; and

WHEREAS, the agreement provides that the District will have a perpetual license for the 1Energy software system for this prototype, and the District will take title to the batteries and other equipment upon completion of the Project; and

WHEREAS, this project is the result of a unique collaboration between 1Energy Services, a software development company interested in developing this type of new

software system for the electric utility industry, the District, and several manufacturers of battery and power conditioning equipment; and

WHEREAS, staff recommend that the Project be declared "special facilities" pursuant to RCW 39.04.270 to enable the District to contract with IEnergy for the procurement of the prototype based upon the fact that this product does not yet exist on the market and will be developed during this Project, that IEnergy has extensive experience with and knowledge of the District and has assembled a team of willing and qualified equipment suppliers, and that the suppliers of batteries and power conditioning equipment will need to contribute expertise to the design of the system; and

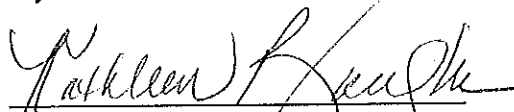
WHEREAS, Washington state law provides that with respect to purchases of "special facilities," the normal competitive bidding requirements may be waived by the Commission provided that reasonable precautions are taken to secure the lowest price practicable under the circumstances; and

WHEREAS, staff's efforts to ensure that the District has secured the lowest price practicable under the circumstances include participation in other efforts to quote and develop a similarly sized project, research into the experiences of other electric utilities with significant scale battery energy storage facility deployments; indicative quotes for smaller similar systems, and staff's own experience with a battery-based energy storage system for the Admiralty Inlet Tidal Energy Pilot Project.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 1 of Snohomish County, Washington, as follows:

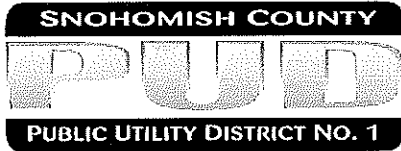
1. Based on the facts set forth above and on staff's recommendation, the agreement for the Modular Energy Storage Appliance Prototype Project and related equipment shall be deemed "special facilities" for purposes of RCW 39.04.270.
2. The Commission hereby waives the statutory requirements for bid and performance bonds which are normally applicable to competitively bid material purchases that might otherwise apply to the procurement of the equipment for this Project.
3. The proposed agreement with 1Energy Services is hereby approved, and the General Manager or his designee is authorized to execute said Agreement on behalf of the District in substantially the form on file with the Office of the Commission.

PASSED AND APPROVED this 6th day of November, 2012.


President


Vice-President


Secretary



2.2

Providing quality water power and service at a competitive price that our customers value

December 17, 2012

1Energy Services, LLC
Attention: David Kaplan
927 North Northlake Way, #100B
Seattle, WA 98103

Re: Professional Services Contract No. 70241 – Modular Energy Storage Appliance (MESA)
Prototype ESS System Design and Project Plan

Dear Consultant,

We have received your signed Professional Services Contract and certificate(s) of insurance.
This is your Notice to Proceed effective December 17, 2012.

The District's Project Leader for this contract is Craig Collar, who can be reached at
(425) 783-1825.

Thank you,

Tania Cornwell
Contracts/Purchasing Agent

cc: Jason Zyskowski

Amendment No. 1 to Professional Services Contract No. 70241

Instructions: Please sign PUD original amendment and return to Contracts as shown below.

Consultant Name and Address:

IBEnergyServices, LLC.
Attention: David Kaplan
927 N. Northlake Way, #100B
Seattle, WA 98103

Return Amendment To:

Public Utility District No. 1 of Snohomish County
Tania Cornwell, Contracts/Purchasing - O2
P.O. Box 1107
Everett, WA 98206-1107

The change herein described shall become a part of the applicable contract subject to all conditions thereof when authorized by both parties pursuant to execution of this Contract Amendment.

Only applicable changes are completed in sections below

Description of Change:

Change Project Leader from Craig Collar to Jason A. Zyskowski,
and other additional personnel as detailed in the attached.

Jason A. Zyskowski, P.E.
Public Utility District No. 1 of Snohomish County
PO Box 1107, M/S O1
Everett, WA 98206-1107
Phone: (425) 783-4332
E-mail: JAZyskowski@SNOPUD.com

Previous "Not to Exceed"

Amount: \$3,500,000.00

Amendment Amount: N/A

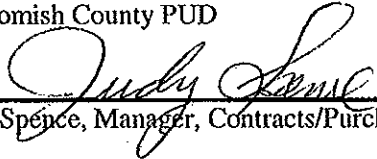
New "Not to Exceed" Amount: N/A

Extend contract term to: N/A

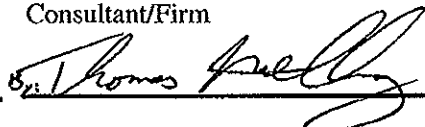
Change in Scope of Work: Modify per above.

Authorized Representative Signatures:

Snohomish County PUD


Judy Spence, Manager, Contracts/Purchasing

Consultant/Firm



Thomas Melling, Vice President
Please Print Name/Title

2/6/13
Date Signed:

2/6/13
Date Signed:

2.3

**Amendment No. 1
to Professional Services Contract No. 70241**

Upon execution of Amendment No. 1, the Energy Storage Project will be managed by the Distribution & Engineering Services Department. It will be part of the Smart Grid Program managed by Will Odell. The table below outlines the project roles and responsibilities. All future correspondence regarding the Professional Services Contract should go through the new designated Project Leader, Jason Zyskowski.

Role	Person	Responsibility
Co-Project Sponsors	Chris Heimgartner and Craig Collar	• Executive Sponsor
Program Manager	Will Odell	• Smart Grid Program • Logistics • SCADA/DMS system integration.
Project Manager / Professional Services Contract Project Leader	Jason Zyskowski	• MESA development and IEnergy Professional Services Contract Project Leader. • Site selection and preparation. • Required permitting and reporting related to site preparation and use. • District integration of ESS to substation physical and local control /power systems. • Access to physical site location and coordination of PUD personnel to connect ESS. • Acceptance testing.

2.4

From: Spangler, Anne
Sent: Wednesday, March 27, 2013 4:58 PM
To: Hall, Kristin; Cornwell, Tania
Cc: Kallstrom, Jeffrey; Barnes, Janet; Herrling, Jim
Subject: Re: 1Energy

What a mess, thanks though.

Connected by DROID on Verizon Wireless

-----Original message-----

From: "Hall, Kristin" <KKHall@snopud.com>
To: "Spangler, Anne" <ALSpangler@SNOPUD.com>, "Cornwell, Tania" <TJCornwell@snopud.com>
Cc: "Kallstrom, Jeffrey" <JKallstrom@SNOPUD.com>, "Barnes, Janet" <JEBarnes@SNOPUD.com>, "Herrling, Jim" <JLHerrling@SNOPUD.com>
Sent: Wed, Mar 27, 2013 23:49:58 GMT+00:00
Subject: FW: 1Energy

Hi Tania, I am forwarding this to Anne also as she is closer to this contract than I am and can hopefully keep you apprised if prevailing wages appear to be necessary. (Anne, it turns out that I did not participate in the call this afternoon as Parker indicated that they were not comfortable with my joining in since their attorney wasn't on the call.) It sounds like there will be some further discussion on these issues tomorrow, when Anne is back in the office.

From: Cornwell, Tania
Sent: Wednesday, March 27, 2013 12:12 PM
To: Hall, Kristin
Subject: 1Energy

Hi Kristin,

I'm just checking in to make certain that Jim and Jan touched bases with you. It was a pretty painful conference call. You were missed! From what I understand, Parker (sub) is comfortable with the PUDs credit however they are not with 1Energy since they are such a new company. They were wanting to see the performance bond. They were told several times that the District classified this contract as a professional service rather than a labor contract. However, they kept saying there is labor involved and they did not understand how we did not require it and that this contract is clearly a Public Works Contract. Parker had also mentioned subbing out work to Henkels & McCoy if I heard correctly. It sounds like I need to collect prevailing wages once things get going. I just want to make certain that I am kept in the loop if this needs to happen, and just wanted to brief you in case you hadn't talked to Jim or Jan.

Tania J. Cornwell
Public Utility District No. 1
of Snohomish County
PO Box 1107, M/S O2
Everett, WA 98206
P: (425) 783-5667
F: (425) 267-6523

2.4

2.5

From: Cornwell, Tania
Sent: Wednesday, March 27, 2013 9:54 AM
To: Hall, Kristin
Subject: 1Energy

Hi Kristin,

Since you will be involved in the meeting with 1Energy. I've attached a PDF of the contract. Just so you are aware, I was pretty much left out of the loop on this contract and it was signed without my involvement. There was no Q/A from contracts, i.e., draft stamped across documents, and date left off first page.



1Energy.pdf

Tania J. Cornwell
Public Utility District No. 1
of Snohomish County
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Everett, WA 98206
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2.6

From: Cornwell, Tania
Sent: Wednesday, March 27, 2013 12:12 PM
To: Hall, Kristin
Subject: 1Energy

Hi Kristin,

I'm just checking in to make certain that Jim and Jan touched bases with you. It was a pretty painful conference call. You were missed! From what I understand, Parker (sub) is comfortable with the PUDs credit however they are not with 1Energy since they are such a new company. They were wanting to see the performance bond. They were told several times that the District classified this contract as a professional service rather than a labor contract. However, they kept saying there is labor involved and they did not understand how we did not require it and that this contract is clearly a Public Works Contract. Parker had also mentioned subbing out work to Henkels & McCoy if I heard correctly. It sounds like I need to collect prevailing wages once things get going. I just want to make certain that I am kept in the loop if this needs to happen, and just wanted to brief you in case you hadn't talked to Jim or Jan.

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2.7

Questions were raised by Contracts/Purchasing concerning:

- Bid Law for Material Purchases and Labor
- Prevailing Wages
- Amendment not to be entered into Passport
- Sub billing District directly when contract is between Prime and District

Direction was given by Senior Management that Legal counsel has classified this service as a Professional Services and the above items will not pertain to this contract.

2.8.1

AMENDMENT NO. 2 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 2 to Professional Services Agreement is made and entered into as of May 6, 2013, by and between IEnergy Services, LLC ("*IEnergy*") and Public Utility District No. 1 of Snohomish County (the "*District*").

Background

IEnergy and the District entered into a Professional Services Agreement dated November 20, 2012 (the "*Agreement*"), pursuant to which the District engaged IEnergy to, among other things, develop and deploy a modular energy storage system (the "*Prototype*"). In connection with its performance under the Agreement, IEnergy intends to procure certain equipment and services from Parker-Hannifin Corporation ("*Parker*"), and from other manufacturers of equipment.

As a condition of participating in the development of the Prototype, several of the manufacturers will require IEnergy to advance a portion of the payment for that equipment at the time the equipment is ordered. The needs of the equipment manufacturers will require an amendment to the Milestone Payment schedule in Exhibit 1 to the Agreement.

In addition, Parker has requested that IEnergy authorize the District to direct a portion of milestone payments due under the Agreement directly to Parker as an accommodation to their credit policies.

The Parties therefore wish to amend the Agreement, as follows:

1. The following verbiage is added to the end of Paragraph A in Article IV:

With respect to each milestone payment request, IEnergy shall forward directly to the District, as part of the documentation supporting such payment request, the invoice from Parker-Hannifin Corporation ("*Parker*") which corresponds to any amounts payable to Parker in connection with the applicable milestone, and the District will make payment directly to Parker in the manner requested and on the terms specified in such invoice. To the extent any milestone payment request includes an allocation for any amount payable to another equipment supplier, IEnergy shall forward the applicable supplier invoice directly to the District as part of the documentation supporting such payment request, and the District will make payment directly to such other equipment supplier, in the manner requested in such invoice.

2. A new Article XXX entitled "Third Party Beneficiaries" shall be added to the end of the Agreement, which Article shall state as follows: "This Contract does not and is not intended to confer any rights or remedies upon any person other than the parties, except that it is expressly agreed that Parker is an intended beneficiary of Article IV. A, as amended, and that such provision may not be amended without Parker's prior written consent. Accordingly, in the event that the District fails to comply with the requirement to make certain payments directly to Parker as more fully provided in such subsection, Parker shall be entitled to bring an action against the District seeking to recover as damages against the District any amounts due to Parker pursuant to such provision, together with any additional losses, expenses or costs resulting directly from such failure."

2.8.1

3. The Amended Exhibit 1 attached hereto and incorporated herein by this reference is substituted for the original Exhibit 1.

Except as set forth herein, the Agreement will remain in full force and effect.

The parties have executed this Amendment No. 2 to Professional Services Agreement as of the date first above written.

1ENERGY SERVICES, LLC

PUBLIC UTILITY DISTRICT NO. 1 OF
SNOHOMISH COUNTY

By: Thomas Melling
Name: Thomas Melling
Title: Vice President

By: Steven J. Klein
Name: Steven J. Klein
Title: General Manager

REVIEWED BY:

DATE:

[Signature]
5/3/13

1 PROJECT SUMMARY: MESA APPLIANCE PROTOTYPE

Under this SOW, the District will engage 1Energy as System Engineer and System Integrator to develop and deploy the MESA Appliance prototype. 1Energy will in turn engage the appropriate suppliers to deliver required system components and services.

Consistent with MESA design goals, the District intends that core ESS components be commercially-replaceable by alternate suppliers. Accordingly, 1Energy will accommodate this capability in the MESA Appliance prototype and ensure that its suppliers do likewise.

1.1 SCHEDULE

Work performed hereunder will commence on or about the date on which 1Energy receives from the District the applicable Notice to Proceed and is expected to be complete by the Completion Date. A firm project Completion Date will be established in the Project Schedule, as part of Milestone 0: Design Stage Gate. If 1Energy fails to complete the Work prior to the completion date in the Project Schedule (as such may be amended from time to time by the parties in writing), such failure will be a material breach of this SOW (provided that such failure is not caused by any delay described in Article VII of the Contract), and the District shall have the right, in its sole discretion, to terminate the Contract pursuant to Article XXV of the Contract.

1Energy shall not perform any Work until 1Energy's receipt of an applicable "Notice to Proceed," as described in Article III of the Contract.

Under this phase of the SOW, 1Energy will initially produce the System Design and Project Plan, covering in detail the components, architecture, schedule, roles and responsibilities of 1Energy, its suppliers and the District. The System Design and Project Plan will include the Project Schedule, the plan and criteria for determining whether the Work is acceptable to the District and thus that Final Acceptance has been achieved (the Acceptance Testing Plan), and other tasks as described herein. Section 2.2, below, enumerates the items to be covered in the System Design and Project Plan.

2.8.1

**AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work**

Developing the System Design and Project Plan is expected to take approximately three-to-five months, from 1Energy's receipt of an applicable "Notice to Proceed," as described in Article III of the Contract.. This project phase will culminate in a Design Stage Gate, at which point the District will decide, based upon the System Design and Project Plan, whether or not to proceed with development and deployment of the MESA Appliance prototype. Should the District decide in the affirmative, the District will deliver to 1Energy a subsequent Notice to Proceed. For the avoidance of doubt, either party may terminate the Contract after 1Energy's delivery of the System Design and Project Plan but before the District's delivery of the subsequent Notice to Proceed.

1.3 LOCATIONS

The MESA Appliance prototype will be deployed and field-tested at the District Edgecomb substation.

Prior to field deployment, communications subsystems of the MESA Appliance prototype will be tested at the District's smart grid test lab (District Operations Center, South Everett, WA).

Electrical and communications subsystems of the MESA Appliance prototype will be tested prior to field deployment at locations provided by 1Energy or its suppliers, as required by the System Design and Project Plan.

1.4 PAYMENT

Upon 1Energy's delivery to the District of the applicable MESA Appliance prototype deliverable, District will pay 1Energy the applicable not-to-exceed amount specified in the table below. Actual payment amounts will be determined on a time and materials basis according to the 1Energy rate schedule below, actual hours worked, and actual material, equipment, subcontractor and related costs (including, without limitation, travel and related costs for supplier visits, standards meetings, conferences, public relations, etc.), provided that 1Energy may include a markup of up to 10% on any software, services, and equipment obtained from third parties. If the costs and fees invoiced to the District for a milestone are less than the applicable not-to-exceed amount for such milestone, the not-to-exceed amount for the subsequent milestone automatically will be increased by an amount equal to the difference between the not-to-exceed amount for the applicable milestone and the amount invoiced to the District for such milestone (i.e., unused not-to-exceed amounts will roll over to the next milestone).

Milestone 0: Design Stage Gate	Milestone 1: Notice to Proceed	Milestone 1: Comms. Test	Milestone 2: ESS Received	Milestone 23: ESS Deployed & Commissioned	Milestone 4: Final Acceptance	Total
\$250,000	\$1,000,000 ^(*)	\$500,000 ^(*)	\$750,000 ^(*)	\$1,750,000 ^(*)	\$7501,250,000 ^(*)	\$3,500,000 ^(*)

^(*) Subject to District approval of System Design and Project Plan at Design Stage Gate.

Position	Project Leader	Sr. Program Manager	Sr. Engineer	Engineer
Rate	\$250	\$175	\$175	\$125

2.8.1

AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

The fees invoiced pursuant to the rate schedule above will apply to 1Energy employees and customarily used subcontractors that provide Project Leader, Sr. Program Manager, Sr. Software Engineer, or Engineer services, and the 10% markup limitation will not apply to such services.

Payments for Milestones 1-4 are subject to District's prior approval of System Design and Project Plan, and decision to proceed with development and deployment of the MESA Appliance prototype, per Section 1.2, above.

Payment not-to-exceed amounts may be changed by mutual written agreement of the District and 1Energy, for example based upon project changes or augmentations determined by the System Design and Project Plan, provided that the total amount payable under this contract shall not exceed \$ 3,500,000 (the "Contract Price").

1Energy will be solely responsible for compensating its suppliers under the MESA Appliance prototype project.

1.5 DISTRICT PROJECT LEADER

The District's Project Leader for the MESA Appliance prototype project is specified in Article XVII of the Contract:

2 DELIVERABLES

Under this SOW, 1Energy will: 1) develop the System Design and Project Plan for a MESA Appliance prototype ESS based on the Target Capabilities listed below and specified in the Product Performance Requirements; and, 2) subject to the District's express written approval of the System Design and Project Plan (which may occur by or be contained in an electronic mail message), develop and deploy the MESA Appliance prototype, which will meet all of the requirements and specifications set forth in the System Design and Project Plan to be developed pursuant to Section 2.2 below, as well as performance and documentation requirements set forth in Attachments A and B, respectively.

2.1 MESA APPLIANCE PROTOTYPE – TARGET CAPABILITIES

The District has established the following target capabilities for the MESA Appliance prototype:

- At least 1 MW real power, 1 MVAR reactive power or any combination of real and reactive power within the 1 MVA circle.
- At least 1 MWh of energy storage.
- Installed at the District's Edgcomb substation (unless another substation is mutually agreed to in writing during System Design).
- Communicates with the District SCADA System, Distribution Management System (DMS), Enterprise Solution Software, and power scheduling systems.
- Capable of supporting multiple battery types, to enable battery upgrade and/or replacement by different manufacturers.

2.2 SYSTEM DESIGN AND PROJECT PLAN

2.8.1
AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

The System Design and Project Plan will include the elements listed below, which may be changed or augmented by mutual agreement of the District and 1Energy:

- Final Target Capabilities (updates, if any, to Section 2.1, above)
 - Part of Architectural Description and Specification (listed below)
- Performance requirements, similar in form and content to Attachment A.
- System Design documentation, similar in form and content to Attachment B, and including:
 - Architectural Description and Specification
 - Architectural diagram and description for the major components and assembly
 - As built specifications
 - Electrical interface (physical and protocol) between major components specification
 - Software architecture and specification
 - Bill of materials
 - List of components that make up the product
 - Integration Plan
 - Top level assembly and installation diagram
 - Personnel safety (This includes the District, 1Energy employees and 1Energy's subcontractors)
 - Site preparation and layout
 - Product assembly and installation procedure
 - Power-up sequence and plan
 - Commissioning plan
 - Communication with the District's electrical grid operating and control software systems
 - Verification plan
 - Plan for verifying the MESA Appliance prototype meets all requirements set forth in the System Design and Project Plan, this SOW, and all attachments, including but not limited to the development of mutually-agreed-upon final acceptance criteria;
 - Includes all verification activities, including but not limited to verification by 1Energy, third party test labs, and the District.
 - Quality assurance/quality control (QA/QC) plan
- Hazard analysis
 - Identified safety hazards and associated mitigations
 - Arc Flash Study
- District deliverables, similar in form and content to Attachment C
- Roles and responsibilities, similar in form and content to Attachment D
- Training plan
 - Describes training of users
 - Training of emergency responders (Internal and External)
- Operations and maintenance plan
 - User manual
 - Maintenance manual

2.8.1

AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

- Includes both hardware and software
- Operations and maintenance cost
 - Ongoing costs associated with the operation of the product (e.g. filters, fluids, etc.)
- Warranty and ongoing support plan
- List of documentation
 - List of all documentation to be provided by 1Energy to the District
- Acceptance Testing Plan
- Project Schedule (see preliminary timeline Section 2.5, below)
- Final payment schedule (updates, if any, to Section 1.4, above), and cost breakdowns
- Public Relations (communications plan)
- Security Plan
 - Physical
 - Cyber

2.3 DESIRED OUTCOMES

Desired outcomes of the MESA Appliance prototype project include:

- A platform for learning, based on 1) experience gained from fielding a system, and 2) insights gained from simulating multiple systems across various configurations, scales and scenarios (in conjunction with UW researchers).
- Open architecture proof of concept that 1) supports multiple battery types from different manufacturers, and 2) delivers open interfaces to enable a range of suppliers (batteries, power conversion and others) in the emerging ESS ecosystem.

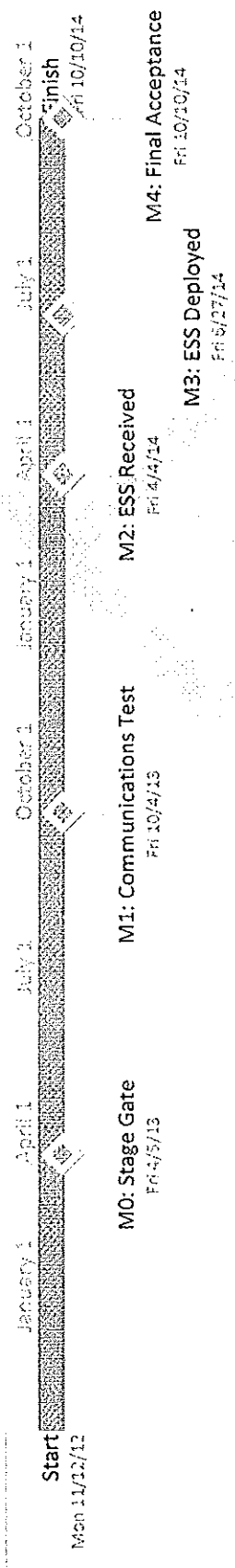
2.4 TITLE TO PROTOTYPE EQUIPMENT

Subject to Article XIX of the Contract, title to the MESA Appliance prototype shall pass to the District upon the conclusion of the project and payment of the final payment milestone. 1Energy shall provide a bill of sale upon request by the District.

2.8.1

AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

2.5 PRELIMINARY TIMELINE



2.8.2

RESOLUTION NO. 5630

A RESOLUTION Authorizing Amendment of an Agreement with
1Energy Services for the Modular Energy Storage Appliance
Project

WHEREAS, Public Utility District No. 1 of Snohomish County (the "District") entered into an agreement with 1Energy Services for the development and deployment of a prototype that will provide a 1-megawatt capacity battery-based energy storage at the District's Edgecomb substation, known as the Modular Energy Storage Appliance Project ("Project"); and

WHEREAS, the Project will be developed in two phases, consisting of a system design and project plan, followed by the final design and engineering, equipment procurement and installation upon approval of the first phase; and

WHEREAS, the Project Agreement requires 1Energy, as the supplier of the Project, to procure the equipment from a number of cooperating manufacturers and suppliers; and

WHEREAS, the milestone payment schedule set forth in the original Project Agreement did not allow for the type of initial payments for the supply of major equipment that is the standard business practice of the larger battery and power conditioning equipment suppliers; and

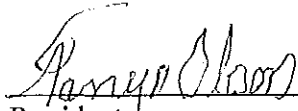
WHEREAS, Staff recommend amending the Agreement to substitute a milestone payment schedule under which \$1 million of additional funds will be payable upon approval of the system design and project plan and notice to proceed, as set forth in the attached Exhibit "A," thus enabling 1Energy to procure the battery and power conditioning equipment needed for the Project; and

2.8.2

WHEREAS, the total Project cost remains unchanged, and Staff believe sufficient funds remain in the later milestones of the Project schedule to ensure completion of the Project:

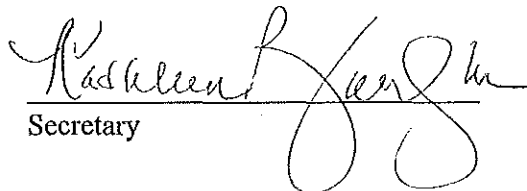
NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 1 of Snohomish County, Washington, that based upon staff's recommendation, the proposed Amendment No. 2 to the Professional Services Agreement between the District and 1Energy Services LLC is hereby approved, and the General Manager or his designee is authorized to execute Amendment No. 2 on behalf of the District in substantially the form attached as Exhibit "A," and to take any actions and to execute further documents as in their judgment may be necessary or desirable in order to carry out the terms of, and complete the transactions contemplated by, this Resolution.

PASSED AND APPROVED this 2nd day of April, 2013.



President

(not present)
Vice-President



Secretary

2.8.2

AMENDMENT NO. 2 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 2 to Professional Services Agreement is made and entered into as of April 2, 2013, by and between 1Energy Services, LLC ("1Energy") and Public Utility District No. 1 of Snohomish County (the "District").

Background

1Energy and the District entered into a Professional Services Agreement dated November 20, 2012 (the "Agreement"), pursuant to which the District engaged 1Energy to, among other things, develop and deploy a modular energy storage system (the "Prototype"). In connection with its performance under the Agreement, 1Energy intends to procure certain equipment and services from Parker-Hannifin Corporation ("Parker"), and from other manufacturers of equipment.

As a condition of participating in the development of the Prototype, several of the manufacturers will require 1Energy to advance a portion of the payment for that equipment at the time the equipment is ordered. The needs of the equipment manufacturers will require an amendment to the Milestone Payment schedule in Exhibit 1 to the Agreement.

In addition, Parker has requested that 1Energy authorize the District to direct a portion of milestone payments due under the Agreement directly to Parker as an accommodation to their credit policies.

The Parties therefore wish to amend the Agreement, as follows:

1. The following verbiage is added to the end of Paragraph A in Article IV:

With respect to each milestone payment request, 1Energy shall forward directly to the District, as part of the documentation supporting such payment request, the invoice from Parker-Hannifin Corporation ("Parker") which corresponds to any amounts payable to Parker in connection with the applicable milestone, and the District will make payment directly to Parker in the manner requested in such invoice. To the extent any milestone payment request includes an allocation for any amount payable to another equipment supplier, 1Energy shall forward the applicable supplier invoice directly to the District as part of the documentation supporting such payment request, and the District will make payment directly to such other equipment supplier, in the manner requested in such invoice.

2. The Amended Exhibit 1 attached hereto and incorporated herein by this reference is substituted for the original Exhibit 1.

Except as set forth herein, the Agreement will remain in full force and effect.

The parties have executed this Amendment No. 2 to Professional Services Agreement as of the date first above written.

1ENERGY SERVICES, LLC

PUBLIC UTILITY DISTRICT NO. 1 OF
SNOHOMISH COUNTY

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

2.8.2

Resolution No. 5630
AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

This Scope of Work (this "SOW") is subject to the terms and conditions of the Professional Services Agreement dated November 20, 2012 (the "Contract"), between 1Energy Services, LLC ("1Energy") and Public Utility District No. 1 of Snohomish County (the "District"), as amended. Capitalized terms that are used but not defined in this SOW will have the meanings given to such terms in the Contract.

1 PROJECT SUMMARY: MESA APPLIANCE PROTOTYPE

The District has launched the MESA Project (Modular Energy Storage Architecture) to explore scalable energy storage solutions for use in its electric distribution system. A core MESA Project deliverable is to deploy and field test a *prototype* modular energy storage system (ESS), called the MESA Appliance prototype, at a District substation, communicating end-to-end with District control center and power scheduling systems.

Under this SOW, the District will engage 1Energy as System Engineer and System Integrator to develop and deploy the MESA Appliance prototype. 1Energy will in turn engage the appropriate suppliers to deliver required system components and services.

Consistent with MESA design goals, the District intends that core ESS components be commercially-replaceable by alternate suppliers. Accordingly, 1Energy will accommodate this capability in the MESA Appliance prototype and ensure that its suppliers do likewise.

Subject to prototype success, the District envisions potential for future MESA-based ESS deployments at multiple substation sites.

1.1 SCHEDULE

Work performed hereunder will commence on or about the date on which 1Energy receives from the District the applicable Notice to Proceed and is expected to be complete by the Completion Date. A firm project Completion Date will be established in the Project Schedule, as part of Milestone 0: Design Stage Gate. If 1Energy fails to complete the Work prior to the completion date in the Project Schedule (as such may be amended from time to time by the parties in writing), such failure will be a material breach of this SOW (provided that such failure is not caused by any delay described in Article VII of the Contract), and the District shall have the right, in its sole discretion, to terminate the Contract pursuant to Article XXV of the Contract.

A preliminary high-level schedule of project tasks and milestones is depicted in Section 2.5 herein. This schedule will be refined and updated during the System Design and Project Planning phase (see next section), ultimately becoming the Project Schedule.

1Energy shall not perform any Work until 1Energy's receipt of an applicable "Notice to Proceed," as described in Article III of the Contract.

1.2 SYSTEM DESIGN AND PROJECT PLAN (MILESTONE 0: DESIGN STAGE GATE)

Under this phase of the SOW, 1Energy will initially produce the System Design and Project Plan, covering in detail the components, architecture, schedule, roles and responsibilities of 1Energy, its suppliers and the District. The System Design and Project Plan will include the Project Schedule, the plan and criteria for determining whether the Work is acceptable to the District and thus that Final Acceptance has been achieved (the Acceptance Testing Plan), and other tasks as described herein. Section 2.2, below, enumerates the items to be covered in the System Design and Project Plan.

2.8.2

Resolution No. 5630

**AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work**

Developing the System Design and Project Plan is expected to take approximately three-to-five months, from 1Energy's receipt of an applicable "Notice to Proceed," as described in Article III of the Contract.. This project phase will culminate in a Design Stage Gate, at which point the District will decide, based upon the System Design and Project Plan, whether or not to proceed with development and deployment of the MESA Appliance prototype. Should the District decide in the affirmative, the District will deliver to 1Energy a subsequent Notice to Proceed. For the avoidance of doubt, either party may terminate the Contract after 1Energy's delivery of the System Design and Project Plan but before the District's delivery of the subsequent Notice to Proceed.

1.3 LOCATIONS

The MESA Appliance prototype will be deployed and field-tested at the District Edgecomb substation.

Prior to field deployment, communications subsystems of the MESA Appliance prototype will be tested at the District's smart grid test lab (District Operations Center, South Everett, WA).

Electrical and communications subsystems of the MESA Appliance prototype will be tested prior to field deployment at locations provided by 1Energy or its suppliers, as required by the System Design and Project Plan.

1.4 PAYMENT

Upon 1Energy's delivery to the District of the applicable MESA Appliance prototype deliverable, District will pay 1Energy the applicable not-to-exceed amount specified in the table below. Actual payment amounts will be determined on a time and materials basis according to the 1Energy rate schedule below, actual hours worked, and actual material, equipment, subcontractor and related costs (including, without limitation, travel and related costs for supplier visits, standards meetings, conferences, public relations, etc.), provided that 1Energy may include a markup of up to 10% on any software, services, and equipment obtained from third parties. If the costs and fees invoiced to the District for a milestone are less than the applicable not-to-exceed amount for such milestone, the not-to-exceed amount for the subsequent milestone automatically will be increased by an amount equal to the difference between the not-to-exceed amount for the applicable milestone and the amount invoiced to the District for such milestone (i.e., unused not-to-exceed amounts will roll over to the next milestone).

Milestone 0: Design Stage Gate	Milestone 1: Notice to Proceed	Milestone 1: Comms. Test		Milestone 2: ESS Deployed & Commissioned	Milestone 4: Final Acceptance	Total
\$250,000	\$1,000,000(*)	\$500,000		\$1,000,000 (*)	\$750,000 (*)	\$3,500,000 (*)

(*) Subject to District approval of System Design and Project Plan at Design Stage Gate.

Position	Project Leader	Sr. Program Manager	Sr. Engineer	Engineer
Rate	\$250	\$175	\$175	\$125

2.8.2

Resolution No. 5630
AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

The fees invoiced pursuant to the rate schedule above will apply to 1Energy employees and customarily used subcontractors that provide Project Leader, Sr. Program Manager, Sr. Software Engineer, or Engineer services, and the 10% markup limitation will not apply to such services.

Payments for Milestones 1-4 are subject to District's prior approval of System Design and Project Plan, and decision to proceed with development and deployment of the MESA Appliance prototype, per Section 1.2, above.

Payment not-to-exceed amounts may be changed by mutual written agreement of the District and 1Energy, for example based upon project changes or augmentations determined by the System Design and Project Plan, provided that the total amount payable under this contract shall not exceed \$ 3,500,000 (the "Contract Price").

1Energy will be solely responsible for compensating its suppliers under the MESA Appliance prototype project.

1.5 DISTRICT PROJECT LEADER

The District's Project Leader for the MESA Appliance prototype project is specified in Article XVII of the Contract:

DELIVERABLES

Under this SOW, 1Energy will: 1) develop the System Design and Project Plan for a MESA Appliance prototype ESS based on the Target Capabilities listed below and specified in the Product Performance Requirements; and, 2) subject to the District's express written approval of the System Design and Project Plan (which may occur by or be contained in an electronic mail message), develop and deploy the MESA Appliance prototype, which will meet all of the requirements and specifications set forth in the System Design and Project Plan to be developed pursuant to Section 2.2 below, as well as performance and documentation requirements set forth in Attachments A and B, respectively.

2.1 MESA APPLIANCE PROTOTYPE – TARGET CAPABILITIES

The District has established the following target capabilities for the MESA Appliance prototype:

- At least 1 MW real power, 1 MVAR reactive power or any combination of real and reactive power within the 1 MVA circle.
- At least 1 MWh of energy storage.
- Installed at the District's Edgcomb substation (unless another substation is mutually agreed to in writing during System Design).
- Communicates with the District SCADA System, Distribution Management System (DMS), Enterprise Solution Software, and power scheduling systems.
- Capable of supporting multiple battery types, to enable battery upgrade and/or replacement by different manufacturers.

2.2 SYSTEM DESIGN AND PROJECT PLAN

2.8.2

Resolution No. 5630
AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

The System Design and Project Plan will include the elements listed below, which may be changed or augmented by mutual agreement of the District and 1Energy:

- Final Target Capabilities (updates, if any, to Section 2.1, above)
 - Part of Architectural Description and Specification (listed below)
- Performance requirements, similar in form and content to Attachment A.
- System Design documentation, similar in form and content to Attachment B, and including:
 - Architectural Description and Specification
 - Architectural diagram and description for the major components and assembly
 - As built specifications
 - Electrical interface (physical and protocol) between major components specification
 - Software architecture and specification
 - Bill of materials
 - List of components that make up the product
 - Integration Plan
 - Top level assembly and installation diagram
 - Personnel safety (This includes the District, 1Energy employees and 1Energy's subcontractors)
 - Site preparation and layout
 - Product assembly and installation procedure
 - Power-up sequence and plan
 - Commissioning plan
 - Communication with the District's electrical grid operating and control software systems
 - Verification plan
 - Plan for verifying the MESA Appliance prototype meets all requirements set forth in the System Design and Project Plan, this SOW, and all attachments, including but not limited to the development of mutually-agreed-upon final acceptance criteria;
 - Includes all verification activities, including but not limited to verification by 1Energy, third party test labs, and the District.
 - Quality assurance/quality control (QA/QC) plan
- Hazard analysis
 - Identified safety hazards and associated mitigations
 - Arc Flash Study
- District deliverables, similar in form and content to Attachment C
- Roles and responsibilities, similar in form and content to Attachment D
- Training plan
 - Describes training of users
 - Training of emergency responders (Internal and External)
- Operations and maintenance plan
 - User manual

2.8.2

Resolution No. 5630
AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype – Scope of Work

- Maintenance manual
 - Includes both hardware and software
- Operations and maintenance cost
 - Ongoing costs associated with the operation of the product (e.g. filters, fluids, etc.)
- Warranty and ongoing support plan
- List of documentation
 - List of all documentation to be provided by 1Energy to the District
- Acceptance Testing Plan
- Project Schedule (see preliminary timeline Section 2.5, below)
- Final payment schedule (updates, if any, to Section 1.4, above), and cost breakdowns
- Public Relations (communications plan)
- Security Plan
 - Physical
 - Cyber

2.3 DESIRED OUTCOMES

Desired outcomes of the MESA Appliance prototype project include:

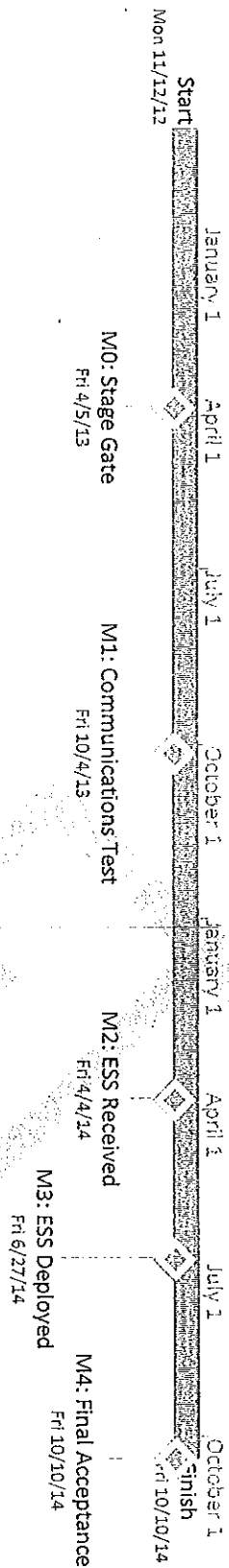
- A platform for learning, based on 1) experience gained from fielding a system, and 2) insights gained from simulating multiple systems across various configurations, scales and scenarios (in conjunction with UW researchers).
- Open architecture proof of concept that 1) supports multiple battery types from different manufacturers, and 2) delivers open interfaces to enable a range of suppliers (batteries, power conversion and others) in the emerging ESS ecosystem.

2.4 TITLE TO PROTOTYPE EQUIPMENT

Subject to Article XIX of the Contract, title to the MESA Appliance prototype shall pass to the District upon the conclusion of the project and payment of the final payment milestone. 1Energy shall provide a bill of sale upon request by the District.

Resolut' No. 5630
AMENDED EXHIBIT 1 to Professional Services Agreement
MESA Appliance Prototype - Scope of Work

2.5 PRELIMINARY TIMELINE



2.8.2

2.9

From: Tom Melling <tomm@1energysystems.com>
Sent: Friday, May 17, 2013 10:25 AM
To: Cornwell, Tania
Cc: David Kaplan (davek@1energysystems.com); Odell, Will; Zyskowski, Jason
Subject: Re: Contract 70241 - MESA Appliance Prototype ESS System Design and Project Plan
Attachments: 2013-05-17 SnoPUD - 1Energy Contract - Amendment3.pdf

Importance: High

Thanks Tania. Attached is a fully executed Amendment. I'll look for the originals, and sign them when they arrive.

Regards,

Tom

Tom Melling
Vice President
1Energy Services, LLC
tomm@1EnergySystems.com
206-930-7099

On 5/17/13 9:29 AM, "Cornwell, Tania" <TJCornwell@snopud.com> wrote:

>Hi Tom,

>

>Attached is a PDF of Amendment 3 for the above-mentioned contract. For
>immediate processing, you may return a countersigned copy via email or
>fax. Two originals will be mailed for your original signature. Please
>make certain to keep one and return the other for the District's file.

>

>If you have any questions, please let me know.

>

>Thank you.

>

>

>

>Tania J. Cornwell
>Public Utility District No. 1
>of Snohomish County
>PO Box 1107, M/S O2
>Everett, WA 98206
>P: (425) 783-5667
>F: (425) 267-6523

>

>



2.9

Snohomish County PUD Original
Consultant Copy

Amendment No. 3 to Professional Services Contract No. 70241

Instructions: Please sign PUD original amendment and return to Contracts as shown below.

Consultant Name and Address:

1Energy Systems, Inc. dba
1Energy Services, LLC
Attention: David Kaplan
811 First Avenue, Suite 263
Seattle, WA 98104

Return Amendment To:

Public Utility District No. 1 of Snohomish County
Tania Cornwell, Contracts/Purchasing - O2
P.O. Box 1107
Everett, WA 98206-1107

The change herein described shall become a part of the applicable contract subject to all conditions thereof when authorized by both parties pursuant to execution of this Contract Amendment.

Only applicable changes are completed in sections below

Description of Change:

This amendment changes the contract Scope of Work completion date of Milestone 0, Design Stage Gate, from approximately three to five months from 1Energy's receipt of the "Notice to Proceed" to eight to ten months from 1Energy's receipt of the "Notice to Proceed."

Previous "Not to Exceed"

Amount: \$3,500,000.00

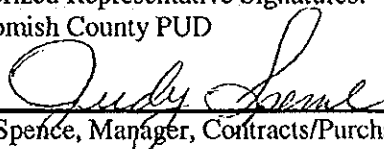
Amendment Amount: N/A

New "Not to Exceed" Amount: N/A

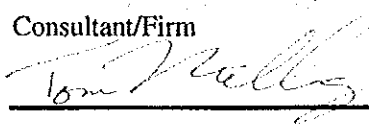
Extend contract term to: N/A

Change in Scope of Work: Modify per above.

Authorized Representative Signatures:
Snohomish County PUD


Judy Spence, Manager, Contracts/Purchasing

Consultant/Firm


Tom Melling

Please Print Name/Title

5/17/2013

Date Signed:

5/14/13
Date Signed:

2.10

AMENDMENT NO. 5 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 5 to Professional Services Agreement is made and entered into as of May 31, 2013, by and between IEnergy Services, LLC ("IEnergy") and Public Utility District No. 1 of Snohomish County (the "*District*").

Background

IEnergy and the District entered into a Professional Services Agreement dated November 20, 2012 (the "*Agreement*"), pursuant to which the District engaged IEnergy to, among other things, develop and deploy a modular energy storage system (the "Prototype"). In connection with its performance under the Agreement, IEnergy intends to procure certain equipment from LG Chem Ltd. ("*LG Chem*"). LG Chem has requested that it be designated a third party beneficiary under the Agreement so that it can directly enforce the District's obligation to make certain payments directly to LG Chem, as more fully described in Article IV, Paragraph A of the Agreement.

The Parties therefore wish to amend the Agreement, as follows:

1. A new Article XXXII entitled "Third Party Beneficiaries" shall be added to the end of the Agreement, which Article shall state as follows: "This Contract does not and is not intended to confer any rights or remedies upon any person other than the parties, except that it is expressly agreed that LG Chem is an intended beneficiary of Article IV. A, as amended, and that such provision may not be amended without LG Chem's prior written consent. Accordingly, in the event that the District fails to comply with the requirement to make certain payments directly to LG Chem as more fully provided in such subsection, LG Chem shall be entitled to bring an action against the District seeking to recover as damages against the District any amounts due to LG Chem pursuant to such provision, together with any additional losses, expenses or costs resulting directly from such failure."

Except as set forth herein, the Agreement will remain in full force and effect.

The parties have executed this Amendment No. 5 to Professional Services Agreement as of the date first above written.

IEnergy SERVICES, LLC

PUBLIC UTILITY DISTRICT NO. 1 OF
SNOHOMISH COUNTY

By: Tom Melling
Name: Tom Melling
Title: Vice President

By: Craig Collier
Name: Craig Collier
Title: Assistant General Manager

REVIEWED BY:

[Signature]
DATE: 5/31/13

2.11

AMENDMENT NO. 4 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 4 to Professional Services Agreement is made and entered into as of May 31, 2013, by and between IEnergy Services, LLC ("IEnergy") and Public Utility District No. 1 of Snohomish County (the "District").

Background

IEnergy and the District entered into a Professional Services Agreement dated November 20, 2012 (the "Agreement"), pursuant to which the District engaged IEnergy to, among other things, develop and deploy a modular energy storage system (the "Prototype"). In connection with its performance under the Agreement, IEnergy intends to procure certain equipment from Mitsubishi International Corporation ("Mitsubishi"). Mitsubishi has requested that it be designated a third party beneficiary under the Agreement so that it can directly enforce the District's obligation to make certain payments directly to Mitsubishi, as more fully described in Article IV, Paragraph A of the Agreement.

The Parties therefore wish to amend the Agreement, as follows:

1. A new Article XXXI entitled "Third Party Beneficiaries" shall be added to the end of the Agreement, which Article shall state as follows: "This Contract does not and is not intended to confer any rights or remedies upon any person other than the parties, except that it is expressly agreed that Mitsubishi is an intended beneficiary of Article IV. A, as amended, and that such provision may not be amended without Mitsubishi's prior written consent. Accordingly, in the event that the District fails to comply with the requirement to make certain payments directly to Mitsubishi as more fully provided in such subsection, Mitsubishi shall be entitled to bring an action against the District seeking to recover as damages against the District any amounts due to Mitsubishi pursuant to such provision, together with any additional losses, expenses or costs resulting directly from such failure."

Except as set forth herein, the Agreement will remain in full force and effect.

The parties have executed this Amendment No. 4 to Professional Services Agreement as of the date first above written.

IEnergy SERVICES, LLC

PUBLIC UTILITY DISTRICT NO. 1 OF
SNOHOMISH COUNTY

By: Tom Melling
Name: Tom Melling
Title: Vice President

By: Craig Collar
Name: Craig Collar
Title: Assistant General Manager

DATE:

REVIEWED BY:

REVIEWED BY:

DATE:

KKH
5/31/13

2.12

From: Zyskowski, Jason
Sent: Tuesday, June 25, 2013 3:55 PM
To: Cornwell, Tania
Subject: FW: 1Energy: Correcting Language in SOW

FYI

Jason Zyskowski
Substation Engineering
Snohomish County PUD #1
Phone: (425) 783-4332

From: Hall, Kristin
Sent: Tuesday, June 25, 2013 2:14 PM
To: Tom Melling
Cc: Zyskowski, Jason; Spangler, Anne
Subject: RE: 1Energy: Correcting Language in SOW

Dear Tom:

As the amendment (Amendment 2) which included the previous changes to the SOW has already been approved by the Board and executed by the parties, it will unfortunately require yet another amendment (Amendment 7) to the Agreement in order to remove the language noted below from the SOW. However, I don't think that Board approval of the amendment will be required, due to the language we inserted in the resolution authorizing Amendment 2 stating that "the General Manager or his designee is authorized to take any actions and to execute further documents as in their judgment may be necessary or desirable in order to carry out the terms of, and complete the transactions authorized by this resolution." (The recitals in the resolution are quite broad and mention 1Energy's need, as the supplier of the project, to procure the equipment from a number of cooperating manufacturers and suppliers.) Thus, either Steve could sign the amendment, or we could ask him (via e-mail) to delegate authority to Craig to sign it.

Also, rather than removing the sentence in question in its entirety, I would prefer to revise it as follows: "Except as otherwise specifically provided in the Agreement, as amended, 1Energy will be solely responsible for compensating its suppliers under the MESA Appliance prototype project." If this is acceptable, please let me know and I will prepare a draft Amendment 7 for your review and comment.

Best Regards,
Kristin

From: Tom Melling [<mailto:tomm@1energysystems.com>]
Sent: Monday, June 24, 2013 9:29 PM
To: Hall, Kristin
Cc: Zyskowski, Jason
Subject: 1Energy: Correcting Language in SOW

Kristin,

2.12

Mitsubishi International Corporation (MIC) has been working hard to wrap up the few remaining issues with 1Energy. MIC's main concern is making sure the payment structure doesn't have any uncertainties, and 1Energy is providing that assurance to MIC. There is some old language in the SOW (which continues in the Amended SOW) that is potentially inconsistent. In section 1.4, the last sentence states: "1Energy will be solely responsible for compensating its suppliers under the MESA Appliance prototype project." Since 1Energy will be forwarding invoices from suppliers to the PUD, which the PUD will pay directly, this sentence is no longer correct. 1Energy would like to re-execute the SOW with the PUD with that sentence removed. If this is acceptable, please let me know as soon as you can.

Thanks.

Tom

Tom Melling
Vice President, Operations
1Energy Services, LLC
tomm@1EnergySystems.com
206-930-7099

2.13

AMENDMENT NO. 6 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 6 to Professional Services Agreement is made and entered into as of July 2, 2013, by and between IEnergy Services, LLC ("IEnergy") and Public Utility District No. 1 of Snohomish County (the "District").

Background

IEnergy and the District entered into a Professional Services Agreement dated November 20, 2012 (the "Agreement"), pursuant to which the District engaged IEnergy to, among other things, develop and deploy a modular energy storage system (the "Prototype"). In Amendment 2 to the Agreement, Article IV.A. of the Agreement was revised to provide that certain payments must be made by the District directly to third party equipment suppliers, as more fully described therein. However, the parties subsequently realized that this language is inconsistent with certain language in Exhibit 1 to the Agreement (Scope of Work), and have agreed to modify such language for consistency with Article IV.A. of the Agreement.

The Parties therefore wish to amend the Agreement, as follows:

1. The final sentence of Section 1.4 of Exhibit 1 (Scope of Work) to the Agreement shall be deleted in its entirety and replaced with the following sentence: "Except as otherwise specifically set forth in Section IV.A. of the Agreement, as amended, IEnergy will be solely responsible for compensating its suppliers under the MESA Appliance prototype project."

Except as set forth herein, the Agreement will remain in full force and effect.

The parties have executed this Amendment No. 6 to Professional Services Agreement as of the date first above written.

IEnergy SERVICES, LLC

PUBLIC UTILITY DISTRICT NO. 1 OF
SNOHOMISH COUNTY

By: Tom Mellor
Name: Tom Mellor
Title: Vice President, Operations

By: Steven J. Klein
Name: Steven J. Klein
Title: General Manager

REVIEWED BY: [Signature]

DATE: 7/3/13



2.14

Snohomish County PUD Original
Consultant Copy

Amendment No. 7 to Professional Services Contract No. 70241

Instructions: Please sign PUD original amendment and return to Contracts as shown below.

Consultant Name and Address:

1Energy Systems, Inc.
1Energy Services, LLC
Attention: David Kaplan
811 First Avenue, Suite 263
Seattle, WA 98104

Return Amendment To:

Public Utility District No. 1 of Snohomish County
Tania Cornwell, Contracts/Purchasing - O2
P.O. Box 1107
Everett, WA 98206-1107

The change herein described shall become a part of the applicable contract subject to all conditions thereof when authorized by both parties pursuant to execution of this Contract Amendment.

Only applicable changes are completed in sections below

Description of Change:

Modify Scope of Work completion date of Milestone 0, Design Stage Gate, from approximately eight to ten months from 1Energy's receipt of the "Notice to Proceed" to fourteen months from 1Energy's receipt of the "Notice to Proceed."

**Previous "Not to Exceed"
Amount:**

\$3,500,000.00

Amendment Amount:

N/A

New "Not to Exceed" Amount:

N/A

Extend contract term to:

N/A

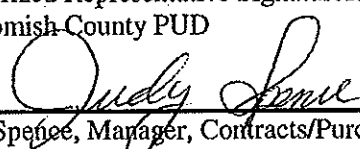
Change in Scope of Work:

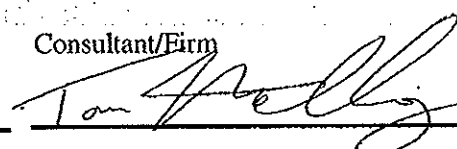
Modify per above.

Authorized Representative Signatures:

Snohomish County PUD

Consultant/Firm


Judy Spence, Manager, Contracts/Purchasing


Tom Melling, Exec. VP, Operations

Please Print Name/Title

10/8/13
Date Signed:

10/11/13
Date Signed:

2.15

TIMN340 - CONTRACT AMENDMENT - [Passport Asset Suite 6] [Click here to Start](#)

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1 Click OLE Icon to access word processing. Execute to create a new Amendment.

Contract: 00070241 Facility: EDP Contract Status: ISSUED 12/17/2012
Amendment: 010 Previous Next Facility Group: Amendment Status: REVIEW 12/30/2013
Amended By: JAZYSKO Company: EL Execution Date:
Project: SG11 Print Status: Image: **Execute**
Title: AMEND CONTRACT 70241 TO BIFURCATE PROJECT INTO TWO PHASES

Amendment Details

Contract Value
Prior: \$3,500,000.00
Amendment: \$880,000.00
New Value: \$4,380,000.00 USD
HTX: ☒

Pricing Method
Prior: MON
Amendment:

Start Date and End Date
Prior: 12/17/2012 06/16/2014
Amendment:

Vendor
Prior: 1ENERGYSYS 01
Amendment:

Scope Details

Amendment Scope  Scope Updated: JAZYSKO 12/24/2013

Related Information

Resources  SCO and Insura  Contacts  Change Request 
Milestones  Communication  Documents  Forecast 

Barbara Tams

Approved:

By: 
Steve Klein, General Manager

1/6/14
Date

2.16

RESOLUTION NO. 5651

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A RESOLUTION Authorizing Amendment of the Agreement with
IEnergy Services for the Modular Energy Storage Appliance
Project

WHEREAS, Public Utility District No. 1 of Snohomish County (the "District") entered into an agreement with IEnergy Services on November 20, 2012, for the development and deployment of a prototype that will provide a 1-megawatt capacity battery-based energy storage at a District substation, known as the Modular Energy Storage Appliance Project ("Project"); and

WHEREAS, the Agreement has been amended a number of times to add clarifications to the milestone project schedule, and the provisions dealing with payment for some of the manufacturers and suppliers that are part of the Project; and

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WHEREAS, the recently announced Washington Clean Energy Fund ("CBF"), includes a Smart Grid Grant for Utilities element which could provide up to \$15 million in funding from the State, and staff believes that the Project is an excellent fit for the objectives of this grant; and

WHEREAS, Staff recommend approval of a contract amendment that better aligns the Project with the funding potential offered by the State grant, provides the ability to maintain Project progress while the State process unfolds, reduces project risk, and more effectively demonstrates the MESA concept; and

WHEREAS, the proposed amendment bifurcates the initially planned single 1-megawatt/1-megawatt hour project into two separate 1-megawatt/0.5-megawatt hour projects integrated together via the MESA software; and

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WHEREAS, the phased project will result in some increased cost and a modified milestone payment schedule, but will deliver a larger, more robust project; and

2.16

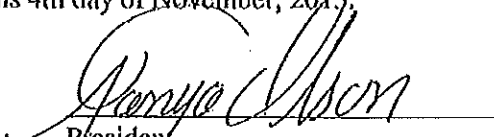
Resolution No. 5651

- 2 -

WHEREAS, the proposed amendment will enable the District to proceed with the first phase of the Project without delay, while setting the stage for utilizing State CEF funding towards the second phase, should the District's application be successful, and the District maintains the ability to opt out of the second phase, and most of the associated additional costs, in the unlikely event that CEF funding is not obtained.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 1 of Snohomish County, Washington, that based upon staff's recommendation, the proposed Amendment No. 8 to the Professional Services Agreement between the District and Energy Services LLC is hereby approved, and the General Manager or his designee is authorized to execute Amendment No. 8 on behalf of the District in substantially the form attached as Exhibit "A."

PASSED AND APPROVED this 4th day of November, 2013,


President


Vice-President

(absent)
Secretary

2.17

From: Zyskowski, Jason
Sent: Monday, June 09, 2014 9:28 AM
To: Cornwell, Tania
Subject: FW: 1Energy Amendment
Attachments: Amendment No. 9 # 1Energy Services.pdf

Tania:

Attached is the signed Amendment 9 for Contract 70241. The original is being sent to me via interoffice mail.

Thanks

Jason Zyskowski
Interim Manager of Substation Engineering
Snohomish County PUD #1
425-783-4332

From: Avatare, Janne
Sent: Monday, June 09, 2014 9:01 AM
To: Zyskowski, Jason
Subject: 1Energy Amendment

Jason,

See attached. I will put the original in the mail to you.

Take care,
Janne

2.17

AMENDMENT NO. 9 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 9 to Professional Services Agreement is made and entered into as of the 30th, day of May 2014, by and between 1Energy Services, LLC ("1Energy") and Public Utility District No. 1 of Snohomish County (the "District").

Background

- A. 1Energy and the District entered into a Professional Services Agreement dated November 20, 2012 (the 'Agreement'), pursuant to which the District engaged 1Energy to, among other things, develop and deploy a modular energy storage system (the "ESS"), and the Agreement has been amended a number of times to add clarifications and revise Exhibits.
- B. Because of the research nature of the project and the desire to gather certain additional data, as well as the decision to split the project into two energy storage systems, the Parties wish to extend the end date for the Agreement as provided below.
- C. The Agreement currently requires 1Energy to provide two Ion Meters as a part of the ESS. The District has agreed to purchase the Ion Meters for 1Energy with the understanding that the contract will be amended to reduce the total dollar amount due 1Energy by the amount of the cost of the Ion Meters to the District. The unit price of the Ion Meters to the District is \$6,177. The contract will be amended to reduce the total dollar amount by \$12,354 for the Ion Meters as provided below.
- D. The Agreement currently requires 1Energy to provide all of the assembly work for the ESS. 1Energy and the District have agreed that the District will complete the assembly work for the ESS for the following amounts:

Labor	\$21,426
Transportation	\$1,920
Material	\$4,000
Overheads	\$19,608
Total	\$46,954

The contract will be amended to reduce the total dollar amount by \$46,954 for the assembly work as provided below. For purposes of clarity, 1Energy will still be directing and overseeing the assembly work, providing the construction plan and sequence of work to make sure the assembly work is carried out correctly.

The Parties therefore wish to amend the Agreement, as follows:

1. The first sentence of Section III of the Agreement shall be replaced in its entirety as follows:

2.17

The term of this Contract shall begin on the Effective Date and continue until (i) December 15, 2015, provided that, if the District executes a contract with the State of Washington to receive funds under the Clean Energy Fund for the MESA1a/1b ESS, then the term of this Contract shall continue until 24 months after the District executes such contract, or (ii) such other date that the parties mutually agree upon in writing (the "Completion Date").

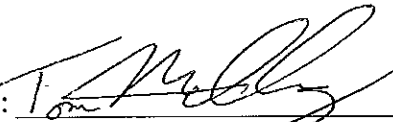
2. In consideration for the District purchasing two Ion Meters for the ESS and providing the assembly work for the ESS, the total price of the contract shall be reduced to \$59,308. To implement this change in the contract price, Milestone 3a shall be reduced from \$754,000 to \$694,692, as shown in the attached Third Amended Exhibit 1, and the Third Amended Exhibit 1 shall be substituted for the Second Amended Exhibit 1. All references in the Agreement to the total contract amount and payment amounts also shall be modified accordingly to reflect this reduction.

Except as set forth herein, the Agreement will remain in full force and effect.

The parties have executed this Amendment No. 9 to Professional Services Agreement as of the date first above written.

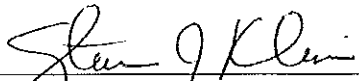
1ENERGY SERVICES LLC

**PUBLIC UTILITY DISTRICT NO. 1
OF SNOHOMISH COUNTY**

By: 

Name: Tom Melling

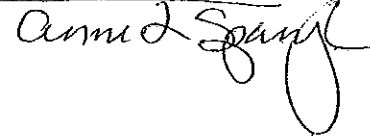
Title: Executive VP, Operations

By: 

Name: Steven J Klein

Title: General Manager

Approved as to form:



2.18

From: Spangler, Anne
Sent: Monday, August 04, 2014 1:39 PM
To: Zyskowski, Jason
Cc: Cornwell, Tania
Subject: RE: MESA 1b NTP

Thanks Jason, this looked fine.

From: Zyskowski, Jason
Sent: Thursday, July 31, 2014 5:36 PM
To: Spangler, Anne
Cc: Cornwell, Tania
Subject: MESA 1b NTP

Kristin:

Attached is the MESA 1b NTP that I plan on having Chris H. and Craig C. sign. Could you please review it before I send it to them for signature.

Thanks

Jason Zyskowski
Manager of Substation Engineering
Snohomish County PUD #1
425-783-4332

2.19

From: Zyskowski, Jason
Sent: Thursday, August 07, 2014 7:51 AM
To: Tom Melling (tomm@1energysystems.com)
Cc: Heimgartner, Chris; Collar, Craig; Odell, Will; Oens, Mark; Cornwell, Tania
Subject: MESA 1b Milestone 0 NTP
Attachments: MESA 1b Milestone 0 NTP.pdf

Tom:

Attached is a scanned copy of the MESA 1, Phase b Milestone 0 Notice to Proceed. Please let me know if you have any questions.

Thanks

Jason Zyskowski
Manager of Substation Engineering
Snohomish County PUD #1
425-783-4332

2.19



Your Northwest renewables utility

August 6th, 2014

Energy Services, LLC
Attention: Tom Melling
811 First Avenue, Suite 510
Seattle, WA 98103

Re: Professional Services Contract No. 70241 – Modular Energy Storage Appliance (MESA)
– Phase 1b, Milestone 0, Notice to Proceed

Dear Consultant,

This is your Notice to Proceed for Contract 70241 Phase 1b, Milestone 0, System Design and Project Plan. We have received your certificate(s) of insurance for this work. This Notice to Proceed only authorizes work on Milestone 0 of Phase 1b as described in the Third Amended Scope of Work for Contract 70241.

Subsequent work on the Contract will not be authorized until the Phase 1b, System Design and Project Plan is complete and accepted by the District

The District's Project Leader for this contract is Jason Zyskowski, who can be reached at (425) 783-4332.

Thank you,

Jason Zyskowski for Craig Collier 8/7/14
Craig Collier, Date
AGM Power, Rates, & Transmission Management
Public Utility District No. 1 of Snohomish County, Washington

2.19



Your Northwest renewables utility

Chris Heimgartner

8/6/14

Chris Heimgartner,
AGM Distribution Engineering
Public Utility District No. 1 of Snohomish County, Washington

Date

Tania Cornwell
Contracts/Purchasing Agent

cc: Jason Zyskowski

2.20 misc

From: Collar, Craig
Sent: Monday, December 17, 2012 2:13 PM
To: Cornwell, Tania
Cc: Zyskowski, Jason
Subject: FW: Energy Storage Project -- Competitive Waiver Exception Justification

From: Klein, Steve
Sent: Monday, December 17, 2012 2:02 PM
To: Collar, Craig
Subject: RE: Energy Storage Project -- Competitive Waiver Exception Justification

Looks good to me, I approve.

From: Collar, Craig
Sent: Monday, December 17, 2012 12:25 PM
To: Klein, Steve
Cc: Cornwell, Tania
Subject: Energy Storage Project -- Competitive Waiver Exception Justification

Steve,

Below is a competitive waiver exception justification for the MESA Energy Storage Project, this is the final piece before issuing the notice to proceed. Please approve by email, or let me know of any questions or concerns.

Thank you,

Craig

**MESA APPLIANCE PROTOTYPE ENERGY STORAGE SYSTEM
\$3,500,000 -- 1Energy Systems Inc. -- Contract #70241**

The objectives of the MESA Energy Storage Project are to 1) develop a standard, scalable approach to energy storage in which electric utilities or grid operators can choose interoperable components – batteries, power converters and software – to meet their specific needs and use cases. This ability to exchange components will make it easier and more cost effective for the District and other utilities/customers to upgrade or replace components as new technologies emerge; and 2) to analyze and model variability and flexibility resources in the District's power distribution system, thereby simulating real-world conditions at scales not currently viable for energy storage device deployment. The planned duration of this project is ~2 years.

The Project will 1) design, procure, install, and field test a 1 MW/1 MW-hr substation-sited storage system in conjunction with Alstom Grid and other commercial partners; and 2) model and analyze potential flexibility in District power supply and demand, in conjunction with University of Washington researchers. The energy storage field test element of the project will give the District real-world experience installing and managing energy storage resources, and will generate key questions to be studied during the modeling phase of the project. The modeling portion of the project will simulate large-scale use of energy storage and other flexibility resources, enabling substantial insights and learning far earlier than would be feasible with actual deployments. Overall results will enable the District to determine applicability of energy storage and related technologies to District power supply, control and scheduling operations. This

2.20 misc

will inform District decision making and strategy relative to the most viable approach for leveraging ongoing advances in distributable energy storage technology towards the achievement of District business objectives.

Grid energy storage is a nascent field, and there are very few entities experienced and qualified to perform this work. Energy Systems' applicable experience and capabilities are unique, and include:

- Electric Vehicle Smart Charging System – Concept, design and development of first IT platform for managed (“smart”) charging of electric vehicles (effectively, an energy storage management system).
- Wind-firming via Software-Controlled Energy Storage System – Concept, design and development of software platform for managing substation-scale energy storage systems in Xcel Energy's Wind-to-Battery project.
- Extensive knowledge of energy storage technologies and suppliers, as well as their strengths and limitations.
- Extensive network of technology industry relationships, essential to assess, form and manage the partnerships required.
- Extensive knowledge of District operations and how energy storage can be applied to create substantial value in coming years.

Additionally, the District has been active in the energy storage and power control industries, and knows of no other consultants with the unique experience and capabilities necessary to deliver on the objectives of this project.